TEXAS DEPARTMENT OF INSURANCE

Engineering Services Program / MC 103-3A, 333 Guadalupe Street, P.O. Box 149104, Austin, Texas 78714-9104 Phone No. (512) 322-2212 Fax No. (512) 463-6693

PRODUCT EVALUATION

Effective Date: April 1, 2013 DR-612 Reevaluation Date: October 2013

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code, and the Texas Engineering Practice Act.

Heritage Wood Gardenaire Sliding Doors, Impact Resistant, manufactured by

Kolbe & Kolbe Millwork Co., Inc. 1323 South Eleventh Avenue Wausau, WI 54401 (715) 842 - 5666

General Description:

System	Description	Label Rating	Design Pressure Rating (psf)	Hallmark Certification
1	Heritage Gardenaire Sliding Door – Wide Stiles	LC-PG45 96 x 98 – SD SD-C45 96 x 98 Missile Level D	+45/-50	413-H-1069.00 413-H-1069.01 413-H-1069.02
2	Heritage Gardenaire Sliding Door – Wide Stiles	LC-PG50 96 x 98 – SD SD-C50 96 x 98 Missile Level D	+50/-50	413-H-1091.00 413-H-1091.01 413-H-1091.02 413-H-1091.03

Product Dimensions:

System	Overall Size	Panel Size
1	96" x 98 ½"	Two: 48 ½ " x 95 ½ "
2	96" x 98 ½6"	Two: 48 ½ " x 95 ½ "

Product Identification (Certification Agency Label on Door):

System		
	Certification Agency	WDMA
	Manufacturer's Name or Code Name	Kolbe & Kolbe Millwork Co., Inc.
1-2	Product Name	Heritage Gardenaire Sliding Patio Door – Wide Stiles
	Test Standards	AAMA/WDMA/CSA 101/I.S.2/A440-05
		AAMA/WDMA/CSA 101/I.S.2/A440-08
		ASTM E 1886 / ASTM E 1996; Missile Level D

Impact Resistance:

Impact Resistant	Requirement
Yes	These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone . The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded

Installation:

Option 1: The assembly shall be fastened to minimum Southern Yellow Pine lumber. The assembly is secured to the wall framing using Kolbe & Kolbe metal installation clips. The installation clips ($1\frac{5}{8}$ " x $10\frac{1}{16}$ " x 0.04") are secured to the frame head and side jambs. The clips are secured to the frame with two (2) No. 8 x $3\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x $1\frac{3}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ " into the wall framing. The spacing of the clips is specified in the table below.

Installation Clip Spacing:

System	Distance From Each	Head	Sill	Side Jambs
	Corner	(on center spacing)	(on center spacing)	(on center spacing)
1-2	Head: 16" Side Jambs: 1911/16"	16"	See Below	1911/16"

Option 2: The assembly shall be fastened to minimum Southern Yellow Pine lumber. The assembly is secured to the wall framing using the assembly frame with minimum No. 10 screws. The fasteners shall be long enough to penetrate a minimum of $1\frac{1}{2}$ inches into the wall framing. The spacing of the fasteners is specified in the table below.

Screw Fastener Spacing:

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System	Distance From Each	Head	Sill	Side Jambs
	Corner	(on center spacing)	(on center spacing)	(on center spacing)
1-2	Head: 16" Side Jambs: 14 $\frac{1}{16}$ "	16"	See Below	14 ½"

Sill: The sill of the assembly is secured to the wall framing with minimum No. 10 x 3" screws. The spacing of the fasteners is specified in the table below.

Sill Fastener Spacing:

System	Distance From Each Corner	Sill	
		(on center spacing)	
1-2	16"	16"	

Mullion (System 2): Gemini clips (1 $\frac{5}{8}$ " x 10 $\frac{1}{16}$ " x 0.04") are secured to the frame at the head, one on either side of the mull. The clips are secured to the frame mullion with two (2) No. 8 x $\frac{3}{4}$ " screws. The clips are secured to the wall framing with one (1) No. 8 x 1 $\frac{3}{4}$ " screw. The fasteners shall be long enough to penetrate a minimum of 1 $\frac{1}{2}$ inches into the wall framing.

Brickmould: The brickmould of the assembly is secured to the wall framing with minimum 2" long T-nails. The fasteners are spaced approximately 16 inches from each corner and approximately 16 inches on center along the head and side jambs.

Note: The manufacturer's installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.